OPERATION ON THE SMARTEAM DATABASE FOR THE INTEGRATION WITH SEE ELECTRICAL EXPERT

In order for the **SEE – Smarteam Integration** process to work flawlessly, a certain degree of customization of both the **Smarteam** database, script and the *SEE* environment is necessary.

Smarteam Database

Class Creation for a SEE Document

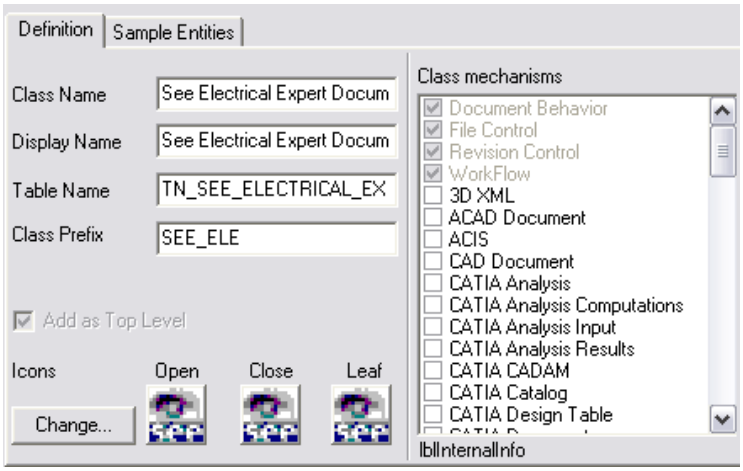
You can create a new class in the "Document" super class and name it as follows, using the **Smarteam Data Model Designer**:

- Class Name = **See Electrical Expert Document**
- Display Name = **See Electrical Expert Document**

Note

Make sure the ***"Add as Top Level"*** *option is checked.*

You can also specify an icon for this new class.



Class Creation for Appended Document

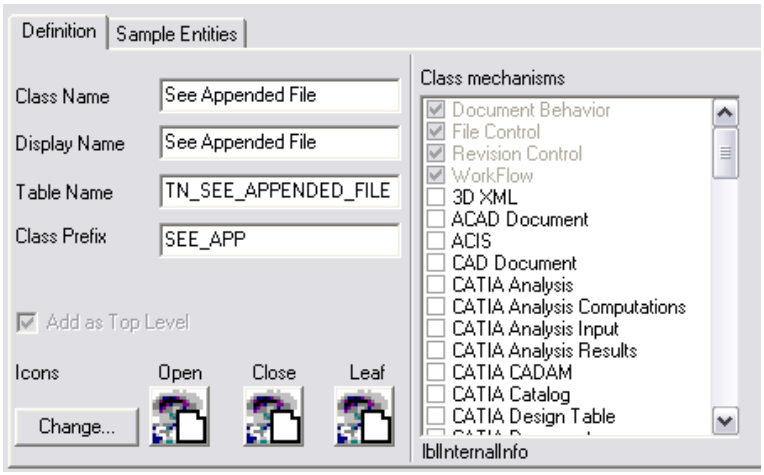
You can create a new class in the "Document" super class and name it as follows, using the **Smarteam Data Model Designer**:

- Class Name = **See Appended File**
- Display Name = **See Appended File**

Note

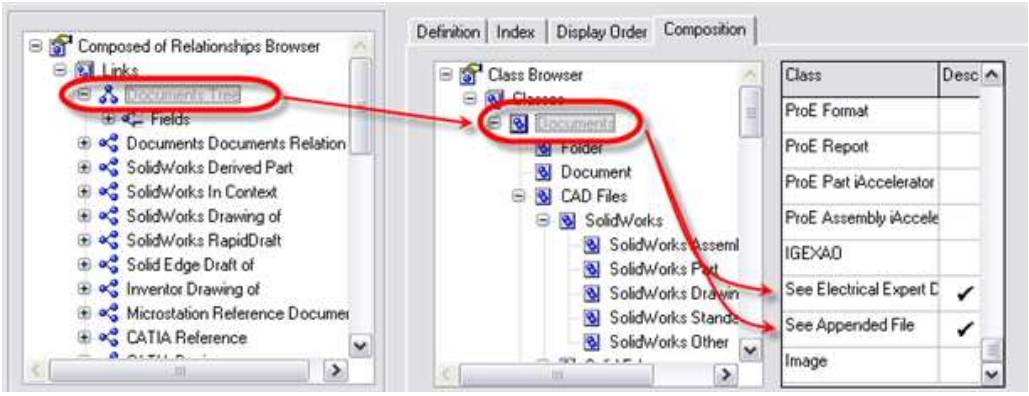
Make sure the ***"Add as Top Level"*** *option is checked.*

You can also specify an icon for this new class.



Composition Rule Setup

- Select the “Document Tree” link using the **Smarteam Data Model Designer**
- Click on the ***Composition*** tab.
- Select the **See Electrical Expert Document** class from the Class tree view and make sure the **See Appended File** class is checked, in order to allow appended files to be created as children of *SEE* documents.

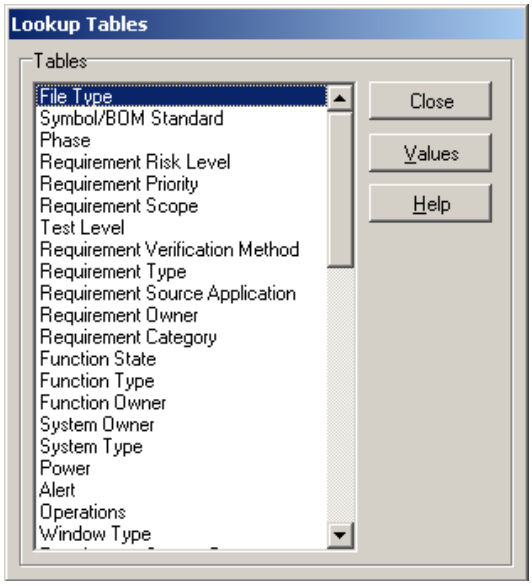


File Type Definition

You need to define a new file type for a *SEE* document, allowing **Smarteam** to associate *SEE* with this file type.

- Within the **Smarteam Editor**, click on **Tool/Lookup Tables**.

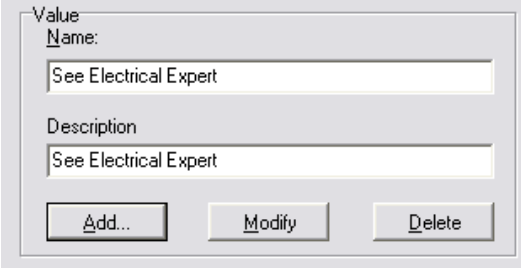
  The following dialogue box is displayed:



- Select ***File Type*** and click the **Values** button.

  The following dialogue box is displayed.

- In the ***Name*** field, type in "See Electrical Expert" and in the ***Description*** field, type in "See Electrical Expert".

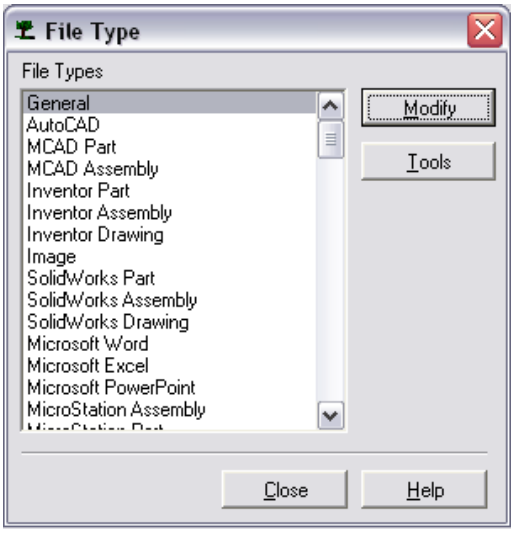


- Click the **Add** button.

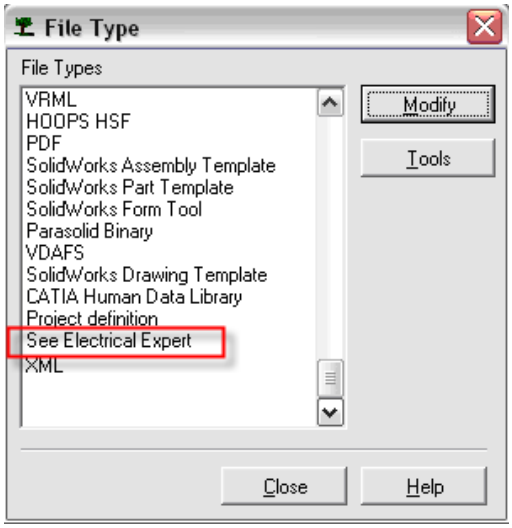
  You can now close this window, as well as the previous one.

- Within the **Smarteam Editor**, click on **Tool/Application Setup**.

  The following dialogue box is displayed:



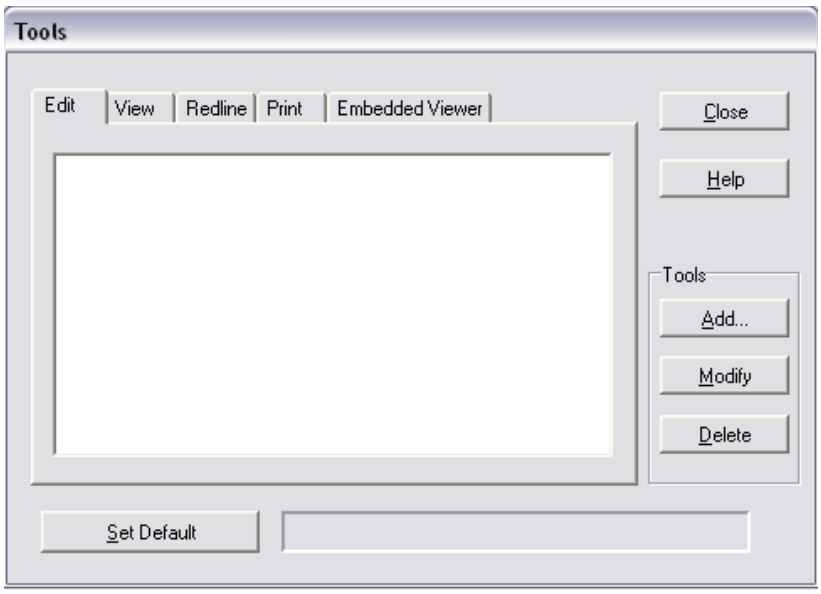
- Scroll down until you find the **See Electrical Expert** file type created in the previous step.



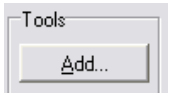
- Select the **See Electrical Expert** file type, then click

.

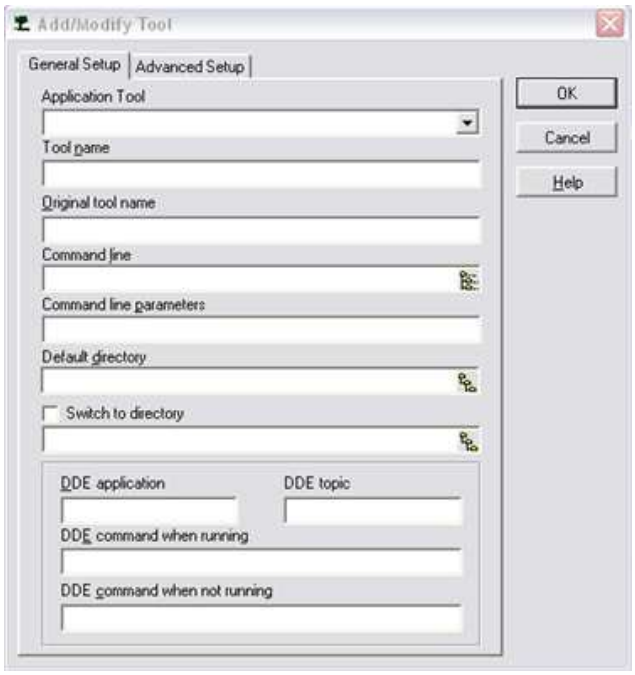
  The following window is displayed:



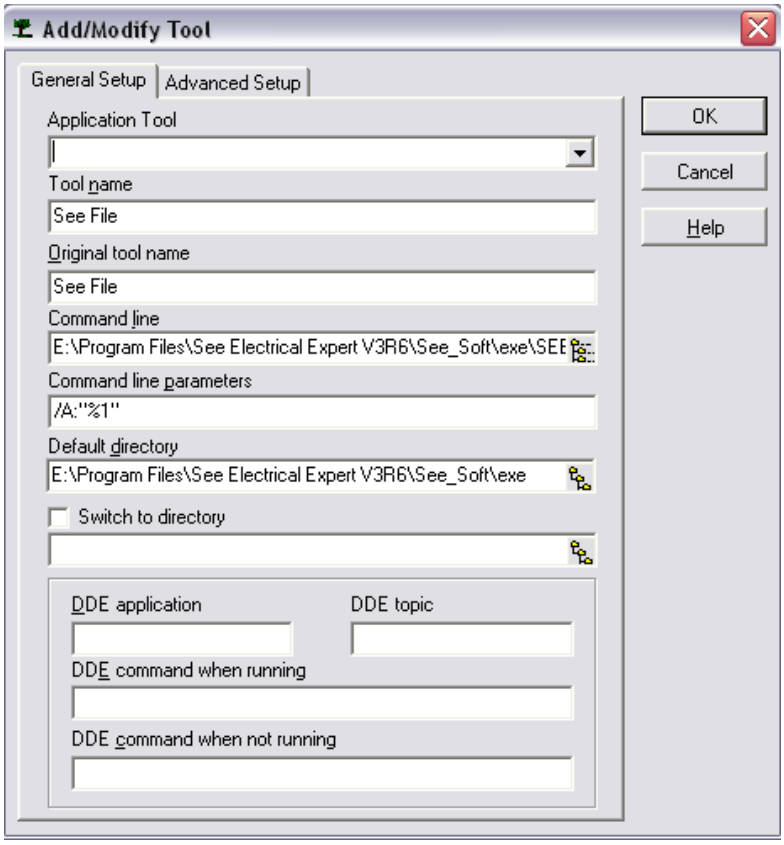
- From the ***Tools*** section, click the **Add** button.



The following window is displayed:



- Select **See File** from the "***Application Tool***" pull-down list.

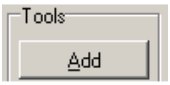


Note

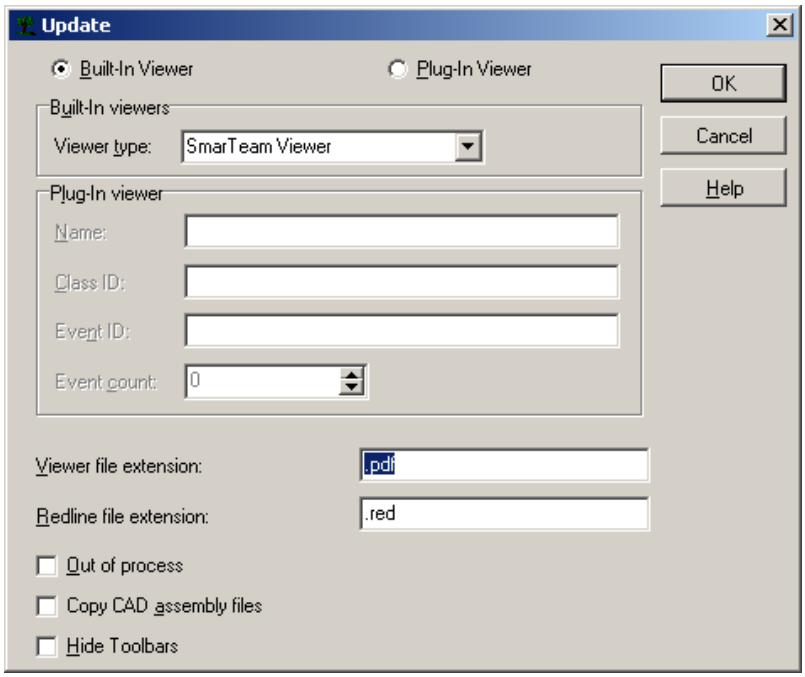
As you make your selection, many other fields will be automatically filled in. Leave them with their default values.

- Click **OK**.
- Then click on the ***Embedded Viewer*** tab.

- From the ***Tools*** section, click the **Add** button.



The following window is displayed:



- Fill in the values as shown in this previous dialogue image and click **OK**.
- Click **Close** on the previous window.

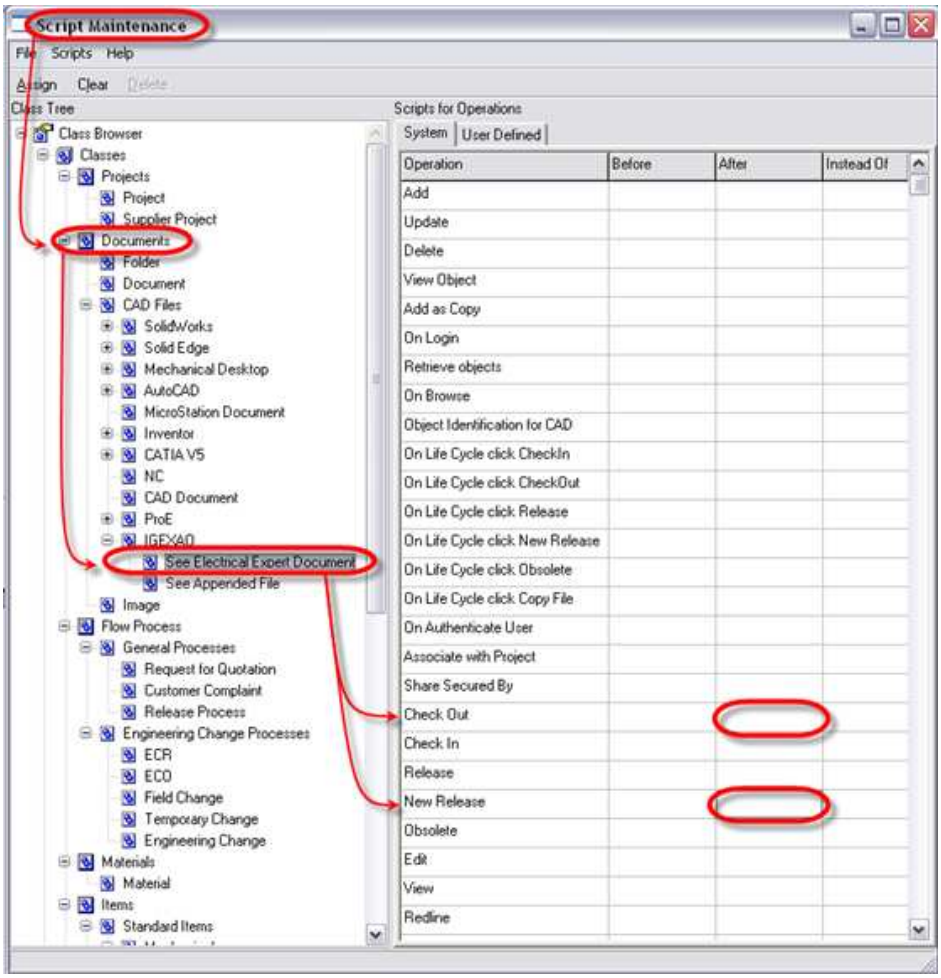
Smarteam Script

Synchronization between a See document and a Smarteam document

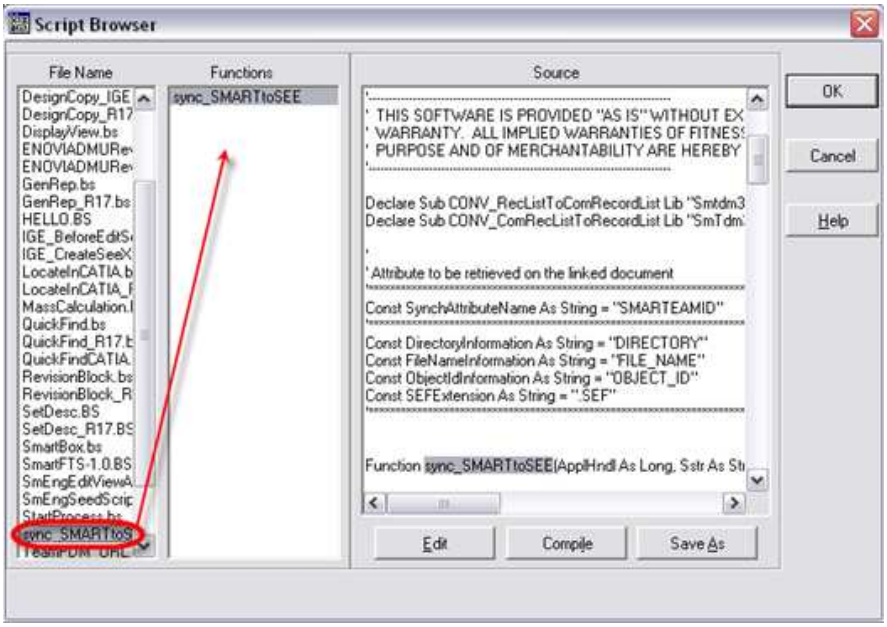
It is necessary to connect a specific Smarteam script (delivered by IGE+XAO) on the life cycle operation ‘Check Out“ and “New Release”; because at the execution of the referred operations, a new Document is created and consequently – a new OBJECT_ID in the Smarteam Database. This script updates the value of the synchronization attribute within SEE with the OBJECT_ID of the new Smarteam Document.

- In the directory **Tools\Smarteam integration\script** there is the script **sync_SMARTtoSEE.bs,** (this file is installed by the See Electrical Expert setup). Copy this file in the directory **script** of Smarteam installation directory.

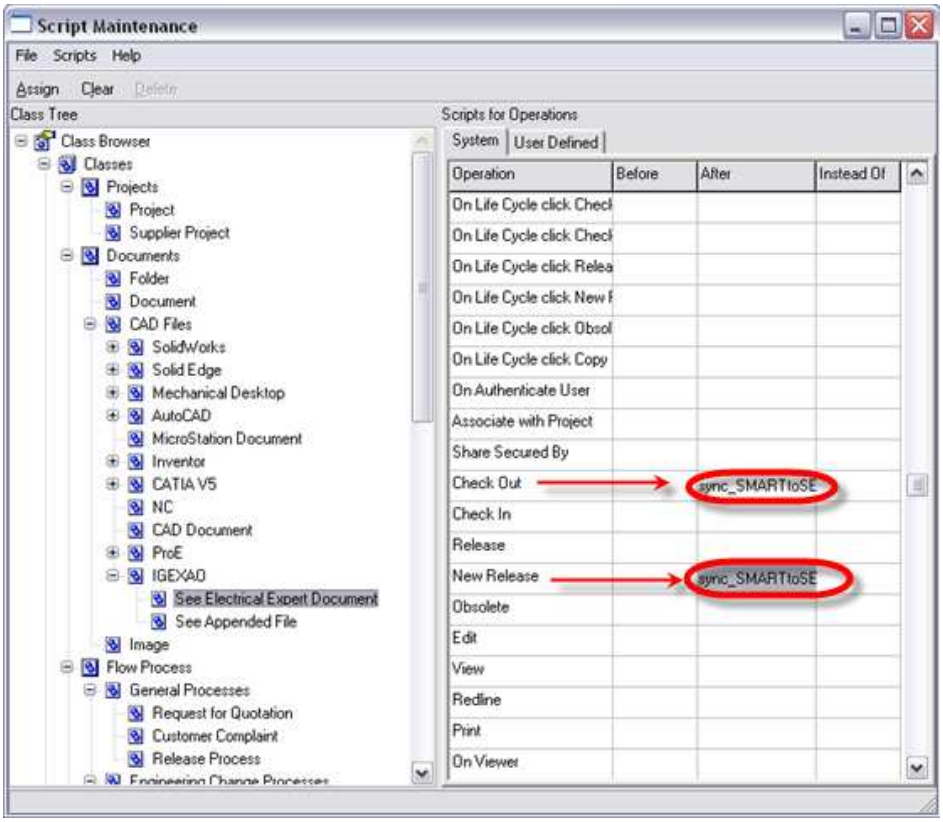
- Launch the Smarteam tools "**SmartBasic Script Maintenance"**
- Click on the class **See Electrical Expert Document** and double click in the column "After" of the operation **"Check Out"**



- At this window you select the script **sync_SMARTtoSEE.bs** (in the first part "*file name")* with a double click, the script appear in the second part (*Functions*) and in the third part we have the code. Click the button OK to validate the window.


Script Browser
File Name
Functions
Source
DesignCopy_IGE
DesignCopy_R17
DisplayView.bs
ENOVIADMURev
ENOVIADMURev
GenRep.bs
GenRep_R17.bs
HELLO.BS
IGE_BeforeEditS
IGE_CreateSeeX
LocateInCATIA.b
LocateInCATIA_F
MassCalculation.
QuickFind.bs
QuickFind_R17.b
QuickFindCATIA
RevisionBlock.bs
RevisionBlock_R
SetDesc.BS
SetDesc_R17.BS
SmartBox.bs
SmartFTS-1.0.BS
SmEngEditViewA
SmEngSeedScrip
StartProcess.bs
sync_SMARTtoS
TeamPDM_URL
sync_SMARTtoSEE
' THIS SOFTWARE IS PROVIDED "AS IS" WITHOUT EX
' WARRANTY. ALL IMPLIED WARRANTIES OF FITNES
' PURPOSE AND OF MERCHANTABILITY ARE HEREBY
Declare Sub CONV_RecListToComRecordList Lib "Smtdm3
Declare Sub CONV_ComRecListToRecordList Lib "SmTdm
' Attribute to be retrieved on the linked document
Const SynchAttributeName As String = "SMARTEAMID"
Const DirectoryInformation As String = "DIRECTORY"
Const FileNameInformation As String = "FILE_NAME"
Const ObjectIdInformation As String = "OBJECT_ID"
Const SEFExtension As String = ".SEF"
Function sync_SMARTtoSEE(AppliHndl As Long, Sstr As St
OK
Cancel
Help
Edit
Compile
Save As

- Repeat the same operation on the life cycle “**New Release",** for to have the following result :

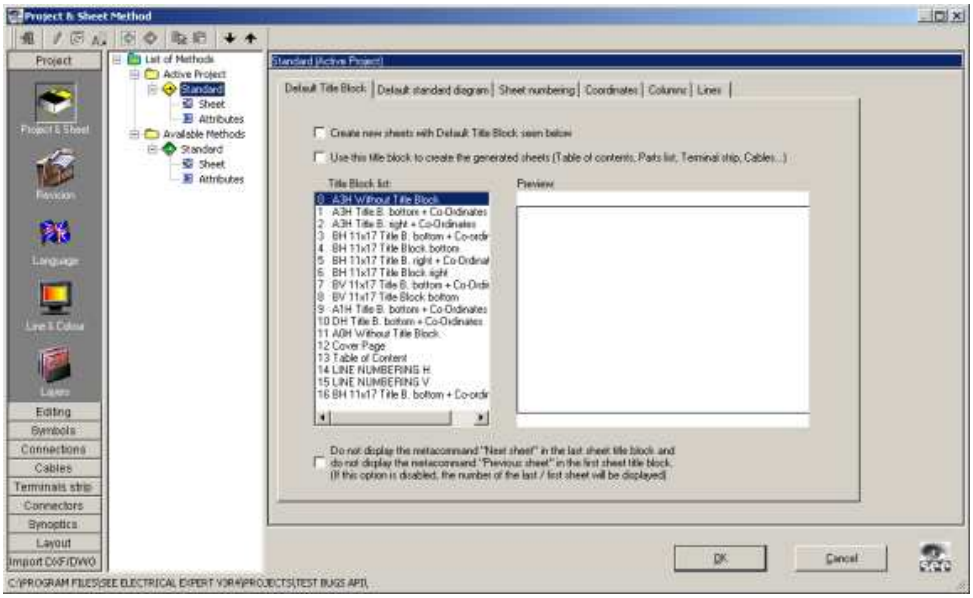


SEE Environment

It is necessary to specify, in *SEE*, various settings for proper synchronization with **Smarteam**.

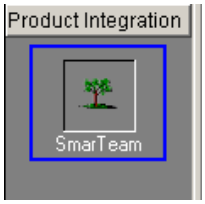
- Click **Environment/Methods** within the **SEE Editor**.

  The following window is displayed:



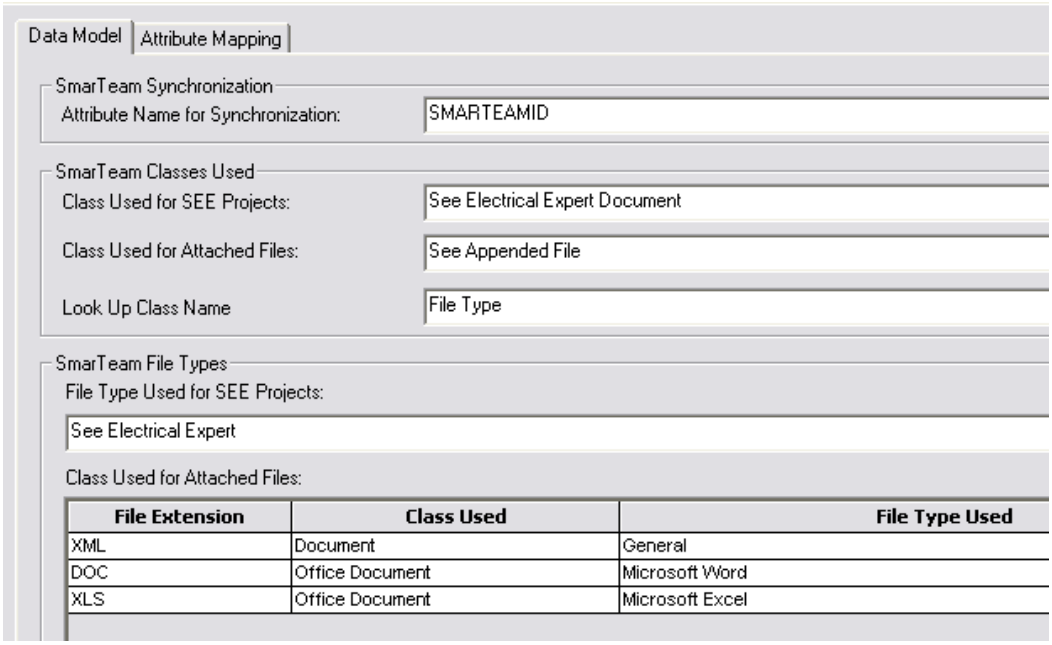
- Click Product Integration in the left section.

  The following depictive icon is contained there:



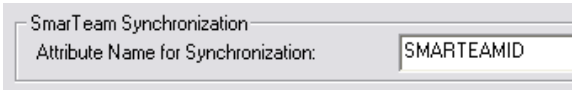
Data Model

This tab allows specifying the ***SEE*** settings to use for proper synchronisation with **SmarTeam**, ex:



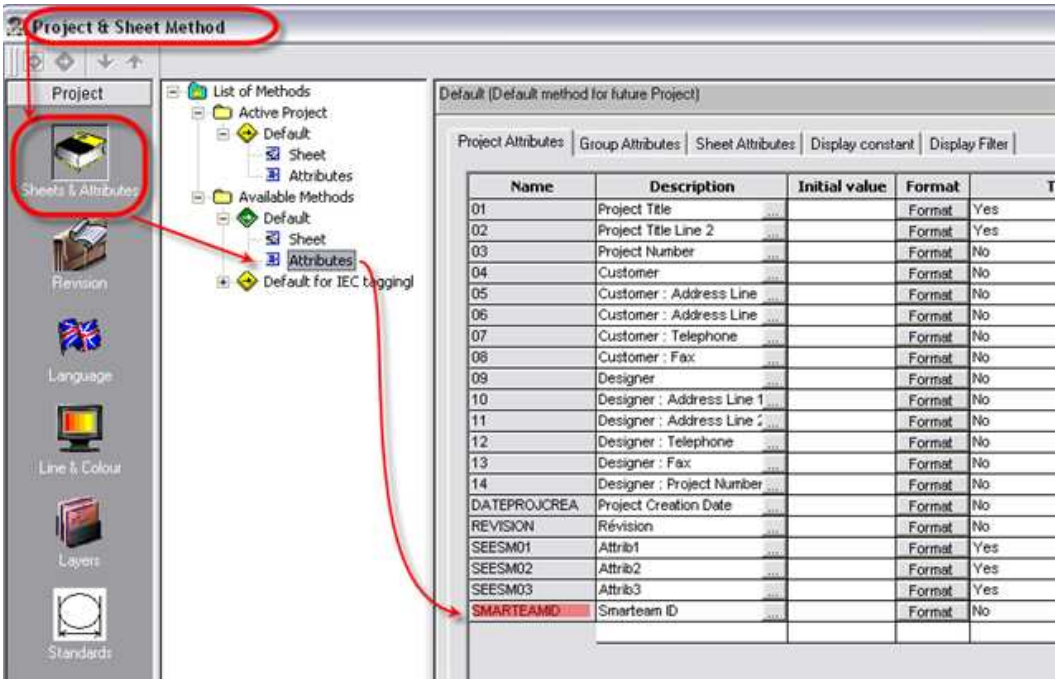
SmarTeam Synchronization

Make sure the proper ***Attribute name*** is entered in the field:



The synchronization attribute, specified in the field, is automatically updated in the ***SEE*** Project when you open it following the execution of a **Smarteam/Life Cycle/Check Out…** or **Smarteam/Life Cycle/New Release…** operation within the ***Smarteam*** Application.

This attribute has to be created in the “project attributes”



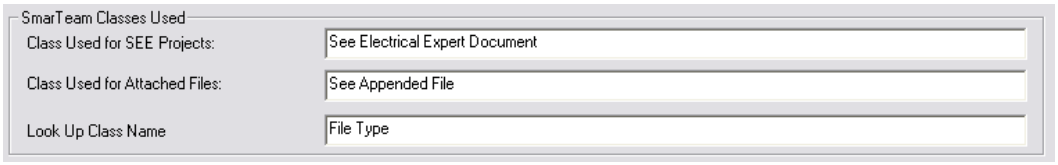
Note See also : Synchronization between a See document and Smarteam document

*The update occurs because at the execution of the referred operations, a new Document is created and consequently – a new OBJECT_ID in the **Smarteam** Database. A special script, previously connected by you to the "Check Out" and "New Release" operations, updates the value of the synchronization attribute within **SEE** with the OBJECT_ID of the new **Smarteam** Document.*

*(For further information on connecting scripts with life cycles, using **Smarteam** tools, refer to the **Smarteam** Documentation.)*

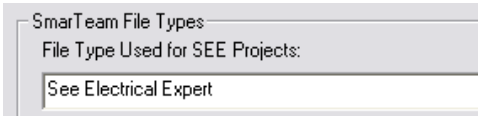
Smarteam Class Used

Make sure the proper values are entered:

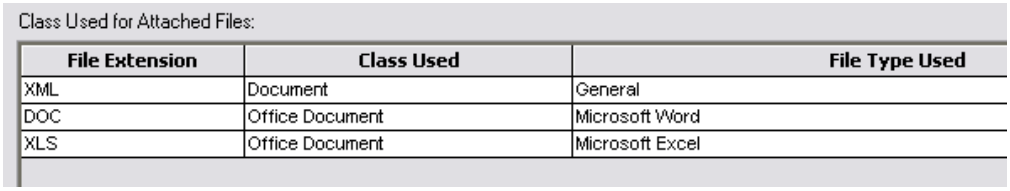


File Type Management

Make sure the proper ***File Type*** is defined for the *SEE* Document:



For each file extension you wish to be identified as an appended file, make sure the proper association is made between the file extension, the class used for this extension and the **Smarteam** file type used.



File Extension	Class Used	File Type Used
XML	Document	General
DOC	Office Document	Microsoft Word
XLS	Office Document	Microsoft Excel

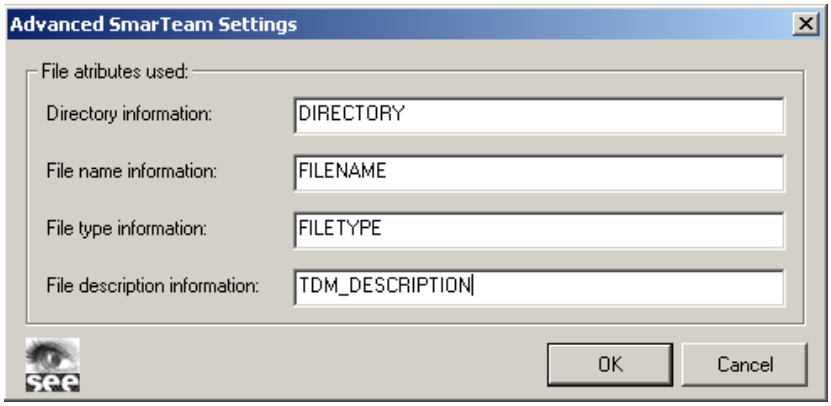
Advanced Settings

Normally, the default values for these settings are correct for most **Smarteam** installations. It is possible to change them simply if you wish to allow some flexibility in case **Smarteam** has to change the system values used by the **SEE – Smarteam Integration**.

- Click the

button.

  The following window is displayed:



  These settings define which **Smarteam** attributes are used for the directory information, the file name information and the file description information.

Note

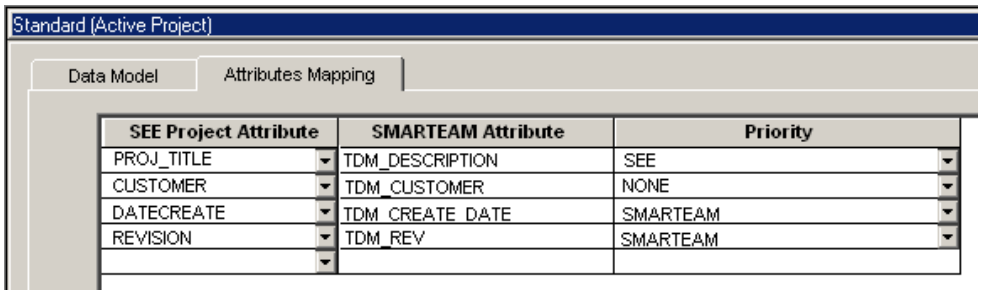
Commentaire [MN1] : \definition #1

The **File description Information** *attribute will be the attribute used for create the name of new see document with the command "Save As" of Smarteam menu in See Electrical Expert.*

- You can then change any of these values, if needed.

Attribute Mapping

Within this tab you define the correspondence between *SEE* Project attributes and SmarTeam Document Object attributes.



"SEE Project Attribute" Field

Click on the within this field to select, from the scrolling list that opens, the desired project attribute to map - you cannot type in this field.

The list contains all SEE Project Attributes listed by their names, read from the **Sheet & Attributes** method.

"SMARTEAM Attribute" Field

Enter manually the name of the desired Smarteam Attribute to be mapped with the selected SEE Project Attribute.

"Priority" Field

Specify, for your pair of attributes, whether and which one of the two applications – SEE or SMARTEAM – will have priority.

After clicking on the button within the field, choose between the three possibilities provided: **NONE**, **SEE** and **SMARTEAM INTEGRATION**.

The **NONE** option is filled in by default whenever you add a new SEE Project Attirbute to map.

After you define a mapping pair, a new empty line automatically appears allowing you to define the next one, if desired.

When you open a **SEE** Project from **SMARTEAM**, the values of the **SMARTEAM** attributes being parts of mapping pairs for which the ***Priority*** was set to **"SMARTEAM INTEGRATION"** or **"NONE"** are transferred to the respective **SEE** Project Attributes.

Note

*You can delete a defined mapping pair by clicking within the **SEE Project Attribute** field to select the whole line and pressing the **"Delete"** key of the keyboard afterwards.*

Synchronization between Paired Attributes when Opening SEE Project within Smarteam

When, within ***Smarteam,*** you open a **SEE** Project, synchronization process is performed for the paired attributes provided:

- The **SEE** Project is associated to **Smarteam**

  Thus, when opening the respective **SEE** Project, the Smarteam Document Object associated to this project is identified.

- Pairs of the desired attributes from the two applications were defined in the **Attributes Mapping** tab of the **Smarteam** Method within **SEE.**
  - If, however, one of the attributes, of which a mapping pair is composed, is missing, synchronization is not performed for this pair.
- The ***Priority*** being set for the particular mapping pairs is **"SMARTEAM INTEGRATION"** or **"NONE".**
- The **SEE** Project is being opened in mode different from ***"for copy".***

  If all of the above conditions are satisfied, then when you open a **SEE** Document from **SMARTEAM,** the values of the **SMARTEAM** attributes being parts of correctly defined mapping pairs are transferred to their respective **SEE** Project Attributes associated.

Synchronization between Paired Attributes at Saving SEE Project within Smarteam

When, within ***Smarteam,*** you save a **SEE** Project by either:

- executing the Smarteam/Save or Smarteam/Save As… commands

  or

- closing the Project

  or

- performing any of the **Smarteam/Life Cycle...** commands such as: Check In, Check Out, Release, New Release, Obsolete, Undo Check Out

Synchronization process is performed for the paired attributes provided:

- The respective **SEE** Project is associated to **Smarteam**

  Thus, when opening the respective **SEE** Project, the Smarteam Document Object associated to this project is identified.

- Pairs of the desired attributes from the two applications were defined in the **Attributes Mapping** tab of the **SmarTeam** Method within **SEE.**
  - If one of the attributes to compose a mapping pair is missing, synchronization is not performed for this pair.
- The ***Priority*** being set for the particular mapping pairs is **"SEE"** or **"NONE".**

If these conditions are satisfied, when saving a **SEE** Project within **SMARTEAM** through any of the actions quoted above, the values of the **SEE** Project Attributes being parts of correctly defined mapping pairs are transferred to their respective **SMARTEAM** attributes – on the Smarteam Document Object.